

A Petition for an Extension of Time of three months to and including August 28, 2001, and a check including the required \$445.00 fee are included to render the Response timely. Should the check be omitted, or should additional fees be deemed necessary in connection with this document, the Assistant Commissioner is hereby authorized to deduct any necessary amounts from Williams, Morgan & Amerson Deposit Account No. 50-0786/4300.012100.

1. AMENDMENT

1.1 IN THE CLAIMS:

Please amend claims 41 to 60 as shown below:

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41. A recombinant herpes simplex virus ICP27 deletion mutant [(rHSV d27.1rc virus)] comprising an adeno associated virus *cap* gene and an adeno associated *rep* gene each operably linked to a homologous or a heterologous promoter.

42. (Amended) The recombinant herpes simplex virus ICP27 deletion mutant [rHSV d27.1rc virus] of claim 41, wherein [the]said homologous promoter comprises [is] a p5, p19 or p40 promoter.

43. (Amended) The recombinant herpes simplex virus ICP27 deletion mutant [rHSV d27.1rc virus] of claim 41, wherein the heterologous promoter is CMV 40[.], HIV LTR, HCMV IE or HSV 110.

44. (Amended) The recombinant herpes simplex virus ICP27 deletion mutant [rHSV d27.1rc virus] of claim 41, wherein the herpes simplex virus is herpes simplex-1 or herpes simplex virus-6.

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45. (Amended) The recombinant herpes simplex virus ICP27 deletion mutant [rHSV d27.1rc virus] of claim 41, wherein [the]said adeno associated virus *cap* gene or said adeno associated *rep* gene is obtained from an adeno-associated virus selected from the group consisting of [is]AAV-1, AAV-2, AAV-3, AAV-4, AAV-5, and [or]AAV-6.

46. (Amended) A recombinant herpes simplex virus mutant comprising an adeno associated virus *rep* gene and an adeno associated virus *cap* gene, each operably associated with a promoter wherein [the]said mutant [is]comprises a deletion or an alteration of a non-essential gene for helper virus function in replication of an adeno-associated virus.

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47. (Amended) The recombinant herpes simplex virus mutant of claim 46, wherein the mutant is an alteration in IE63 immediate early gene effective to increase expression of [gene product]ICP8 protein.

48. (Amended) The recombinant herpes simplex virus mutant of claim 46, wherein said mutant fails to express ICP27 protein.

49. (Amended) The recombinant herpes simplex virus mutant of claim 46, wherein the mutant [is a]fails to express glycoprotein H.

50. (Amended) A recombinant herpes simplex [virus]viral vector comprising an adeno-associated virus *cap* coding sequence, an adeno-associated virus *rep* coding sequence, each operably associated with a promoter comprised within a mutant herpes simplex virus

wherein said viral vector [has]comprises [a]at least a first mutation in immediate early gene IE63 effective to [overexpress]alter expression of ICP8 protein.

51. (Amended) The recombinant herpes simplex [virus]viral vector of claim 50, wherein said mutation [provides]is effective to [underexpression or lack of]decrease expression of ICP27 protein.

52. (Amended) The recombinant herpes simplex [virus]viral vector of claim 50, wherein [the]said mutant herpes simplex virus is HSV-1 or HSV-6.

53. (Amended) The recombinant herpes simplex [virus]viral vector of claim 50, wherein [the]said adeno associated virus cap gene or said adeno associated rep gene is obtained from an adeno-associated virus selected from the group consisting of [is] AAV-1, [AAv-2]AAV-2, AAV-3, AAV-4, AAV-5, and [or]AAV-6.

54. (Amended) The recombinant herpes simplex [virus]viral vector of claim 50, wherein the AAV rep coding sequence is operably linked to promoter p5, p19 or p40.

55. (Amended) The recombinant herpes simplex [virus]viral vector of claim 50, wherein the AAV cap coding sequence is operably linked to a promoter selected from the group consisting of p5, p19 and p40.

56. (Amended) A kit comprising: (a) a [virus]recombinant herpes simplex viral vector, said viral vector comprising:
an AAV *rep* coding sequence operably linked to a promoter;

an AAV *cap* coding sequence operably linked to a promoter; and
HSV-1 helper function coding sequences for AAV replication, said coding
sequences comprising coding sequences for replication proteins comprising UL5, UL8,
UL52 and UL29; and *D*

(b) instructions for use of said vector.

Sub 3 57. (Amended) A kit comprising the recombinant herpes simplex viral vector of claim [56]50, and instructions for use.

C 1 (cont'd) 58. (Amended) A DNA segment comprising an AAV-2 rep coding sequence operably linked to a promoter, an AAV-2 cap coding sequence operably linked to a promoter and at least a first [coding]sequence[s] [for AAV-2 replication proteins comprising proteins]that encodes a Herpes simplex viral protein selected from the group consisting of UL5, UL8, UL52, and UL29.

59. (Amended) The DNA segment of claim 59, comprised within the recombinant herpes simplex [virus]viral vector d27.1. *1*

60. (Amended) A kit comprising the DNA segment of claim 58, and [directions instructions for [use]using said DNA segment.

Please add the following new claims, 61 and 62:

Sub 2 D1 61. The recombinant herpes simplex virus ICP27 deletion mutant of claim 41, identified as recombinant herpes simplex virus rHSV d27.1rc (ATCC XXXXX).